

In accordance with an added feature of the invention, the layer thickness of the semiconductor body has a specific charge density  $\rho$  in a direction  $z$  between the pn junction and the second main surface such that:

$$\int_0^w \rho(z) dz \leq 0.9 q_c$$

in which  $q_c$  denotes a critical value of the charge quantity  $q$  in the semiconductor body at which the electrical breakdown is reached, said charge quantity  $q$  being linked to an electric field strength  $E$  between the first electrode and the second electrode by the above equation

$$\int_0^w \rho(z) dz = q \text{ and Poisson's equation } \nabla E = -4\pi\rho .$$

In the Claims:

Canceled claim 2.

Claim 1(amended). A vertically structured power semiconductor component, comprising:

a semiconductor body of a first conductivity type and having a first main surface and a second main surface opposite said first main surface;